

ABSTRACT

An automatic sliding door closure device for use with a sliding door on a track. The device comprises a housing attached to the door having a connecting arm attached to the housing. A pulley rotatably mounted within the housing guides a cable having an exterior end attached to the doorframe and an interior end connected to the gear, rotating the gear when the sliding door is slid along the track. Tensioning means engaged with the gear tensions rotation of the gear as the door is moved. An airtight cylinder parallel with the track has a plunger arm connected to the connecting arm that is drawn within the cylinder as the door is moved. A flexible member connected to the plunger arm creates an air cushion within the cylinder. An airflow control valve controls intake and outlet of air into the airtight cylinder controlling the closure speed of the door.